

12

A 236 181
DEPARTMENT OF THE
AIR FORCE

JUSTIFICATION OF ESTIMATES FOR FISCAL YEARS 1992/1993
BIENNIAL BUDGET ESTIMATES
SUBMITTED TO CONGRESS FEBRUARY 1991



Missile Procurement, Air Force

91-00935



91 5 31 022

Approved for public release;
Distribution Unlimited

DEPARTMENT OF THE AIR FORCE

TABLE OF CONTENTS

MISSILE PROCUREMENT, AIR FORCE

| | |
|---|----|
| Appropriation Language..... | 1 |
| Program and Financing..... | 2 |
| Object Classification..... | 5 |
| Budget Activity Justification: | |
| Ballistic Missiles..... | 7 |
| Other Missiles..... | 9 |
| Modification of In-Service Missiles..... | 15 |
| Spares and Repair Parts..... | 19 |
| Other Support..... | 22 |
| Comparison of FY 1991 Program Requirements and Financing..... | 29 |
| Comparison of FY 1990 Program Requirements and Financing..... | 32 |

MISSILE PROCUREMENT, AIR FORCE

For construction, procurement, and modification of missiles, spacecraft, rockets, and related equipment, including spare parts and accessories therefor, ground handling equipment, and training devices; expansion of public and private plants. Government-owned equipment and installation thereof in such plants, erection of structures, and acquisition of land, for the foregoing purposes, and such lands and interests therein, may be acquired and construction prosecuted thereon prior to approval of title; reserve plant and Government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes including rents and transportation of things: [\$5,813,532,000] \$5,841,800,000 to remain available for obligation until September 30, [1993] 1994.

Further, for the foregoing purposes, \$6,776,800,000 to become available for obligation on October 1, 1992 and to remain available until September 30, 1995.

**Missile Procurement, Air Force
Program and Financing (in thousands of dollars) SUMMARY**

| Identification code | | 57-3020-0-1-051 | Budget Plan (amounts for PROCUREMENT actions programmed) | | | |
|--|---|-----------------|--|-----------|-----------|-----------|
| | | | 1990 actual | 1991 est. | 1992 est. | 1993 est. |
| Program by activities: | | | | | | |
| Direct program: | | | | | | |
| 00.0101 | Ballistic missiles | | 798,345 | 546,863 | 240,823 | 44,913 |
| 00.0201 | Other missiles | | 1,233,407 | 1,198,892 | 1,595,081 | 2,285,674 |
| 00.0301 | Modification of Inservice missiles | | 86,428 | 109,313 | 196,526 | 128,657 |
| 00.0401 | Spare and repair parts | | 174,426 | 66,620 | 104,279 | 98,218 |
| 00.0501 | Other support | | 4,000,152 | 3,843,387 | 3,705,091 | 4,219,338 |
| 00.9101 | Total direct program | | 6,292,758 | 5,765,075 | 5,841,800 | 6,776,800 |
| 01.0101 | Reimbursable program | | 225,781 | 318,725 | 425,300 | 428,300 |
| 10.0001 | Total | | 6,518,539 | 6,083,800 | 6,267,100 | 7,205,100 |
| Financing: | | | | | | |
| Offsetting collections from: | | | | | | |
| 11.0001 | Federal funds(-) | | -223,302 | -316,125 | -422,600 | -425,500 |
| 13.0001 | Trust funds(-) | | -2,354 | -2,600 | -2,700 | -2,800 |
| 14.0001 | Non-federal sources(-) | | -125 | | | |
| 17.0001 | Recovery of prior year obligations | | | | | |
| 21.4002 | Unobligated balance available, start of year: | | | | | |
| 21.4003 | For completion of prior year budget plans | | | | | |
| 21.4009 | Available to finance new budget plans | | | | | |
| 22.4001 | Reprogramming from/to prior year budget plans | | -104,077 | -216,581 | | |
| 22.4001 | Unobligated balance transferred to other accounts | | -170,287 | 24,200 | | |
| 24.4002 | Unobligated balance available, end of year: | | 90,027 | -24,200 | | |
| 24.4003 | For completion of prior year budget plans | | 216,581 | | | |
| 25.0001 | Available to finance subsequent year budget plans | | 46,269 | | | |
| 39.0001 | Unobligated balance lapsing | | | | | |
| | Budget authority | | 6,371,271 | 5,548,494 | 5,841,800 | 6,776,800 |
| Budget authority: | | | | | | |
| 40.0001 | Appropriation | | 6,916,863 | 5,813,532 | 5,841,800 | 6,776,800 |
| 40.3501 | Appropriation rescinded (-) | | -70,142 | | | |
| 40.3601 | Appropriation rescinded (unob bal) | | -59,900 | -216,581 | | |
| 40.7501 | Reduction pursuant to P.L. 101-165 (-) | | -153,108 | | | |
| 40.7502 | Reduction pursuant to P.L. 101-511 (-) | | | -2,364 | | |
| 41.0001 | Transferred to other accounts (-) | | -262,442 | -65,733 | | |
| 42.0001 | Transferred from other accounts | | | 19,640 | | |
| 43.0001 | Appropriation (adjusted) | | 6,371,271 | 5,548,494 | 5,841,800 | 6,776,800 |
| Relation of obligations to outlays: | | | | | | |
| 71.0001 | Obligations incurred, net | | | | | |
| 72.4001 | Obligated balance, start of year | | | | | |
| 74.4001 | Obligated balance, end of year | | | | | |
| 77.0001 | Adjustments in expired accounts (net) | | | | | |
| 78.0001 | Adjustments in unexpired accounts | | | | | |

Missile Procurement, Air Force
Program and Financing (in thousands of dollars) SUMMARY

Obligations

| Identification code | 57-3020-0-1-051 | 1990 actual | 1991 est. | 1992 est. | 1993 est. |
|-------------------------------------|---|-------------|------------|------------|------------|
| Program by activities: | | | | | |
| Direct program: | | | | | |
| 00.0101 | Ballistic missiles | 802,290 | 718,032 | 349,011 | 145,983 |
| 00.0201 | Other missiles | 1,465,914 | 1,689,610 | 1,540,183 | 2,120,716 |
| 00.0301 | Modification of inservice missiles | 76,311 | 137,424 | 162,427 | 129,754 |
| 00.0401 | Spares and repair parts | 168,540 | 70,032 | 108,616 | 94,448 |
| 00.0501 | Other support | 4,259,869 | 3,541,976 | 3,893,294 | 4,053,302 |
| 00.9101 | Total direct program | 6,772,924 | 6,157,073 | 5,853,531 | 6,544,201 |
| 01.0101 | Reimbursable program | 233,472 | 324,962 | 428,300 | 428,300 |
| 10.0001 | Total | 7,006,396 | 6,482,035 | 6,278,831 | 6,972,501 |
| Financing: | | | | | |
| Offsetting collections from: | | | | | |
| 11.0001 | Federal funds(-) | -220,570 | -316,128 | -422,600 | -425,500 |
| 13.0001 | Trust funds(-) | -2,717 | -2,600 | -2,700 | -2,800 |
| 14.0001 | Non-Federal sources(-) | -125 | | | |
| 17.0001 | Recovery of prior year obligations | -47,551 | | | |
| 21.4002 | Unobligated balance available, start of year: | | | | |
| 21.4003 | For completion of prior year budget plans | -2,421,402 | -1,808,441 | -1,434,406 | -1,422,875 |
| 21.4009 | Available to finance new budget plans | -104,077 | -216,581 | | |
| 22.4001 | Reprogramming from/to prior year budget plans | 90,027 | -24,200 | | |
| 24.4002 | Unobligated balance transferred to other accounts | 1,808,441 | 1,434,406 | 1,422,675 | 1,655,274 |
| 24.4003 | Unobligated balance available, end of year: | 216,581 | | | |
| 25.0001 | For completion of prior year budget plans | 46,269 | | | |
| | Available to finance subsequent year budget plans | | | | |
| 39.0001 | Unobligated balance lapsing | 6,371,271 | 5,548,494 | 5,841,800 | 6,776,800 |
| | Budget authority | | | | |
| Budget authority: | | | | | |
| 40.0001 | Appropriation | 6,918,863 | 5,813,532 | 5,841,800 | 6,776,800 |
| 40.3501 | Appropriation rescinded (-) | -70,142 | | | |
| 40.3601 | Appropriation rescinded (unob bal) | -59,900 | -216,581 | | |
| 40.7501 | Reduction pursuant to P.L. 101-165 (-) | -153,108 | | | |
| 40.7502 | Reduction pursuant to P.L. 101-511 (-) | | -2,364 | | |
| 41.0001 | Transferred to other accounts (-) | -262,442 | -65,733 | | |
| 42.0001 | Transferred from other accounts | | 19,640 | | |
| 43.0001 | Appropriation (adjusted) | 6,371,271 | 5,548,494 | 5,841,800 | 6,776,800 |
| Relation of obligations to outlays: | | | | | |
| 71.0001 | Obligations incurred, net | 6,782,984 | 6,163,310 | 5,853,531 | 6,544,201 |
| 72.4001 | Obligated balance, start of year | 11,292,592 | 10,079,377 | 8,982,481 | 8,628,990 |
| 74.4001 | Obligated balance, end of year | -10,079,377 | -8,982,481 | -8,628,990 | -9,290,158 |
| 77.0001 | Adjustments in expired accounts (net) | 2,329 | | | |
| 78.0001 | Adjustments in unexpired accounts | -47,551 | | | |

Missile Procurement, Air Force
Program and Financing (in Thousands of dollars) SUMMARY

| Identification code | 57-3020-0-1-051 | 1990 actual | 1991 est. | 1992 est. | 1993 est. |
|---------------------|-----------------|-------------|-----------|-----------|-----------|
| 90.0001 | Outlays | 7,950,976 | 7,280,206 | 6,187,022 | 5,863,033 |

Missile Procurement, Air Force
Object Classification (in Thousands of dollars) SUMMARY

| Identification code | 57-3020-0-1-051 | 1990 actual | 1991 est. | 1992 est. | 1993 est. |
|--|-----------------|-------------|-----------|-----------|-----------|
| Direct obligations: | | | | | |
| 131.001 Equipment | | 6,772,924 | 6,157,073 | 5,853,531 | 6,544,201 |
| 199.001 Total Direct obligations | | 6,772,924 | 6,157,073 | 5,853,531 | 6,544,201 |
| Reimbursable obligations: | | | | | |
| 231.001 Equipment | | 233,472 | 324,962 | 425,300 | 428,300 |
| 299.001 Total Reimbursable obligations | | 233,472 | 324,962 | 425,300 | 428,300 |
| 999.901 Total obligations | | 7,006,396 | 6,482,035 | 6,278,831 | 6,972,501 |

FISCAL YEAR 1991

Budget Plan (amounts for procurement

-33,300

-33,300

ACTIVITY: 1. Ballistic Missiles

| | (In Thousands of Dollars) |
|------------------|---------------------------|
| FY 1993 Estimate | \$ 44,913 |
| FY 1992 Estimate | 240,823 |
| FY 1991 Estimate | 546,863 |
| FY 1990 Actual | 668,076 |

SECTION I - PURPOSE AND SCOPE

This activity provides for complete operational intercontinental ballistic missiles, including the airframe structure and installed power units, communications guidance and control equipment, re-entry vehicle (excluding nuclear payloads), instruments and auxiliary equipment installed in the missiles, and penetration aids. It also provides for peculiar support equipment in direct support of operational ballistic missiles including ground guidance and control systems, equipment to maintain the operational status of the system, specialized ground handling equipment, and system trainers. The ground equipment is used to transport, assemble and disassemble, maintain, checkout, launch, and guide ballistic missiles. Specialized training equipment includes system trainers for proficiency training of maintenance and operator crews. This activity also provides for the modernization of the ballistic missile launch and launch control facilities and the integration of new equipment into the launch control center. It includes hardware, training equipment, data and site activation effort required to modernize ballistic missile facilities. Also included is replacement equipment for ballistic missile weapon systems. Replacement equipment requirements provide for peculiar support equipment for out-of-production systems, equipment common to several systems, and equipment required by specialized repair activities.

SECTION II - JUSTIFICATION OF FUNDS REQUESTED

PEACEKEEPER

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| 0 | 195,178 | 0 | 0 |

The Peacekeeper is a four-stage ICBM having multiple independently targetable warheads with much greater accuracy than previous ballistic missiles. The first 50 Peacekeeper missiles are deployed in Minuteman silos. Peacekeeper subsystems provide the following improvements over existing Minuteman missiles: an advanced guidance set for improved accuracy; an advanced solid propellant; lightweight motor cases; and advanced rocket motor nozzles. FY 1992 funds are requested to complete procurement of missile support equipment, provide for contract closeout and completion of residual tasks.

REPLACEMENT EQUIPMENT - STRATEGIC (BALLISTIC)

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| - | 45,645 | - | 44,913 |

Replacement equipment includes items to replace peculiar and common support equipment worn out or damaged beyond economical repair and common items required for new ballistic missile systems entering the inventory. It provides for the replacement of organizational and base level missile support equipment.

ACTIVITY: 2. Other Missiles

| (In Thousands of Dollars) | |
|---------------------------|------------------------|
| FY 1993 Estimate | \$2,248,474 |
| FY 1992 Estimate | 1,595,081 |
| FY 1991 Estimate | 1,165,592 (1,198,892)* |
| FY 1990 Actual | 1,366,876 |

SECTION 1 - PURPOSE AND SCOPE

This activity provides funds for procurement of strategic air-to-ground cruise missiles, tactical ground-to-ground cruise missiles, tactical air-to-air, air-to-ground and ground-to-air missiles, target drones, and missile replacement equipment. Weapon system cost includes flyaway costs (airframe, propulsion equipment, electronics and armament), peculiar support equipment (PSE), system peculiar training equipment and publications, and technical data.

* The Program and Financing (P&F) Schedule reflects a proposed rescission of \$33.3 Million from the Maverick line item. This proposal has been withdrawn and FY 1991 BA-2 total has been annotated above to reflect this change.

SECTION 11 - JUSTIFICATION OF FUNDS REQUESTED

The FY 1992/1993 budget request includes funds for the procurement of the Advanced Cruise Missile. Have Flag, AGM-130 Powered GBU-15, Imaging Infrared (IIR) Maverick, HARM, target drones, Short Range Attack Missile II (SRAM II), Advanced Medium Range Air-to-Air Missile (AMRAAM), HAVE NAP and Missile Replacement Equipment.

Strategic Missiles

ADVANCED CRUISE MISSILE

| (In Thousands of Dollars) | | | |
|---------------------------|----------------|----------------|--------------------------|
| | <u>FY 1992</u> | <u>FY 1993</u> | |
| | <u>Qty</u> | <u>Amount</u> | <u>Qty</u> <u>Amount</u> |
| | 120 | 501,788 | 102 450,123 |

The Advanced Cruise Missile (ACM) is a low-observable air-launched cruise missile. ACM incorporates substantial improvements in survivability, range, accuracy, and targeting flexibility over current inventory assets. It is being tested for use on both the B-52H and the B-1B aircraft.

Have Flag - Information concerning this program is included in classified budget documentation material.

HAVE NAP

| (In Thousands of Dollars) | | | |
|---------------------------|----------------|----------------|--------------------------|
| | <u>FY 1992</u> | <u>FY 1993</u> | |
| | <u>Qty</u> | <u>Amount</u> | <u>Qty</u> <u>Amount</u> |
| | 32 | 34,662 | 0 0 |

HAVE NAP is an air-to-ground, medium range, precision guided missile currently operational in the Israeli Air Force. The weapon system is planned to be employed on Strategic Air Command (SAC) B-52's as a standoff conventional weapon against designated high value point and defense suppression targets.

SRAM II

| (In Thousands of Dollars) | | | |
|---------------------------|--------|---------|--------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| - | 10,969 | 25 | 87,370 |

The SRAM II is an improved nuclear air-to-surface missile developed to replace the SRAM A. The system will be capable of penetrating advanced defensive threats to strike hard and relocatable targets from standoff ranges. Primary carrier aircraft will be the B-1B and B-2s. The 1992 request supports nonrecurring costs at the prime contractor's plant. The 1993 request begins low rate production of twenty-five missiles.

Tactical Missiles

AGM -130 POWERED GBU-15

| (In Thousands of Dollars) | | | |
|---------------------------|--------|---------|---------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| 120 | 70,017 | 149 | 100,735 |

The AGM-130 program is a flexible stand-off weapon. The FY 1992 and FY 1993 requests provide funding to continue low rate production as well as funding for special tooling and test equipment required for full rate production.

AGM-65D/G MAVERICK

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|--------|---------|--------|
| QTY | AMOUNT | QTY | AMOUNT |
| - | 5,490 | - | - |

The AGM-65D and G missiles are rocket-propelled, air-to-surface, precision-guided tactical missiles with a "stand-off" launch and leave capability. The missiles are guided by tracking signals developed from the naturally occurring thermal energy of the target. The AGM-65D has a (125 lb) conical shaped charge warhead, which is detonated by a contact fuze mechanism. The AGM-65G is essentially the same as the "D" version only it employs a larger (300 lb) high explosive warhead. Both the AGM-65D and G missiles incorporate imaging infrared (IIR) guidance compatible with all TV MAVERICK capable aircraft and target acquisition systems that are being planned for tactical aircraft.

The FY 1992 request covers contract closeout as well as residual tasks.

AGM-88A HARM

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|---------|---------|---------|
| QTY | AMOUNT | QTY | AMOUNT |
| 465 | 113,151 | 901 | 225,741 |

Developed jointly by the Air Force and Navy, the Advanced High-Speed Anti-Radiation Missile (HARM) is an air-to-surface missile that is guided to enemy radar sites by homing in on emitting signals. HARM characteristics include software flexibility, inflight retargeting, high speed, large launch envelope, wide band coverage in a single head, high sensitivity and compatibility with both Air Force and Navy tactical aircraft. The increased sophistication, concentration and lethality of enemy ground based, radar guided, missile and anti-aircraft artillery systems threaten the ability of tactical aviation to accomplish its mission and survive. HARM provides a lethal counter to this threat. In 1992 the Air Force will procure 465 missiles, with 901 missiles to be procured in 1993.

Advanced Medium Range Air-to-Air Missile (AMRAAM)

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|---------|---------|---------|
| QTY | AMOUNT | QTY | AMOUNT |
| 1,000 | 768,432 | 1,310 | 867,031 |

Developed jointly by the Air Force and Navy, the AMRAAM is an air-to-air missile with significant improvements in operational utility and combat effectiveness over the AIM-7F/M Sparrow missile. It is a radar guided, all-weather, all-environment, beyond-visual-range, air-to-air missile compatible with the F-14, F-15, F-16 and F-18. It will have a performance envelope significantly improved over the AIM-7F/M, increased missile velocity, a "launch and maneuver" employment capability, and the capability for multiple target attack during a single intercept. The 1992 request procures 1,000 AMRAAMs, with 1,310 to be procured in 1993.

Target Drones

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|--------|---------|--------|
| QTY | AMOUNT | QTY | AMOUNT |
| 60 | 28,833 | 124 | 64,365 |

Target drones are remotely piloted vehicles used to simulate threat aircraft during test and evaluation of air-to-air missiles. Both full-scale and subscale targets with associated augmentation, scoring and countermeasures devices are required. Funding in 1992 procures 60 subscale BQM-34A drones. Funding in 1993 procures 44 QF-106 full-scale drones and 80 subscale BQM-34A drones.

Replacement Equipment

| (In Thousands of Dollars) | | | |
|---------------------------|--------|---------|--------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| - | 29,145 | - | 29,570 |

Requirements for replacement equipment provide for peculiar support equipment for weapon systems that are no longer in production, equipment common to several systems, and equipment required by specialized report activities. In FY 1992 and FY 1993 the funding is required to procure replacement equipment for the AGM-84 HARPOON, AIM-7 SPARROW, AIM-9 SIDEWINDER, AGM 65-A MAVERICK, AGM-69 SRAM, and ALOM, and RAPIER.

ACTIVITY: 3. Modification of In-service Missiles

| (In Thousands of Dollars) | |
|---------------------------|-----------|
| FY 1993 Estimate | \$128,657 |
| FY 1992 Estimate | 196,526 |
| FY 1991 Estimate | 109,313 |
| FY 1990 Actual | 86,428 |

SECTION I - PURPOSE AND SCOPE

This activity provides for modification of missile systems and drones, direct ground support equipment, missile training equipment, and components for this equipment. These costs include modification kits, revised handbooks, and engineering effort. These programs are designed to improve reliability, enhance performance, and increase maintainability by incorporating approved modifications resulting from technical advances, service use, and continuing test programs.

SECTION II - JUSTIFICATION OF FUNDS REQUESTED

The FY 1992 and FY 1993 missile modification program consists of Class IV modifications necessary for safety improvements, extension of service life or correction of material deficiencies, and Class V modifications that incorporate changes to enhance the operational capability of the fielded systems. Several Class III update modifications are also programmed to bring fielded missiles into line with production line configuration. Advances in technology and weapon system service life extensions necessitate the modification of in-service missile systems to enable strategic, tactical, and support forces to maintain superiority over hostile forces. Funding for installation is included with each modification.

HAVE NAP

| (In Thousands of Dollars) | |
|---------------------------|----------------|
| <u>FY 1992</u> | <u>FY 1993</u> |
| \$1,706 | \$1,221 |

The FY 1992/93 request provides for modification of the HAVE NAP missiles not used in Initial Operational Test and Evaluation to comply with United States operational and safety standards.

LGM-30 Minuteman III Modification

| (In Thousands of Dollars) | |
|---------------------------|----------------|
| <u>FY 1992</u> | <u>FY 1993</u> |
| \$144,715 | \$52,430 |

The FY 1992/93 requests continue the Rapid Execution and Combat Targeting (REACT) mod to Minuteman III to replace equipment in all operational launch control centers.

AGM-65D Maverick

(In Thousands of Dollars)

| | <u>FY 1992</u> | <u>FY 1993</u> |
|--|----------------|----------------|
| | \$4,402 | \$1,628 |

The FY 1992 request completes a Class V modification for 825 AGM-65D missiles and depot support equipment for compatibility with the new digital autopilot and pneumatic actuation system. This modification updates operational capability for current pilot training. The FY 1993 request provides for a Class III modification for correction of deficiencies found during development and initial use.

AQM

(In Thousands of Dollars)

| | <u>FY 1992</u> | <u>FY 1993</u> |
|--|----------------|----------------|
| | \$12,040 | \$11,191 |

Information concerning this program is included in classified budget documentation.

AIM-9 SIDEWINDER

(In Thousands of Dollars)

| | <u>FY 1992</u> | <u>FY 1993</u> |
|--|----------------|----------------|
| | \$872 | \$31,364 |

The FY1992/93 request provides for modification of existing AIM-9M all-up-round missiles with an upgraded guidance and control system. The upgrade provides a superior air-to-air missile by increasing the counter-countermeasures capability and head-on acquisition range.

AGM-88A HARM Modification

(In Thousands of Dollars)

| | <u>FY 1992</u> | <u>FY 1993</u> |
|--|----------------|----------------|
| | \$2,147 | \$2,229 |

The FY 1992/1993 request continues modification program to correct deficiencies revealed during operational testing and initial use. These corrections are normally incorporated into the production line at the earliest time, however those missiles that could not be corrected while in production must be corrected through the modification process.

AGM-86A Air Launched Cruise Missile Modification

| (In Thousands of Dollars) | |
|---------------------------|----------|
| FY 1992 | FY 1993 |
| \$27,950 | \$25,222 |

The FY1992 and FY1993 requests provide for a modification to convert the ALCM munitions lift trailer used in loading ALCMs on B-52s to a trailer that will be common to both the B-52, B-1, and B-2. This modification will make configuration management easier and will reduce operation and maintenance costs. The program incorporates two safety modifications.

Peacekeeper Modifications

| (In Thousands of Dollars) | |
|---------------------------|---------|
| FY 1992 | FY 1993 |
| \$2,370 | \$3,034 |

The FY 1992 and FY1993 programs provide funding for miscellaneous Class IV reliability and maintainability modifications.

Other (Modifications Under \$2.0 Million)

| (In Thousands of Dollars) | |
|---------------------------|---------|
| FY 1992 | FY 1993 |
| \$324 | \$338 |

The FY 1992 and FY1993 programs provide \$.3 million each year for miscellaneous modifications on the AIM-7F SPARROW, to improve reliability, maintainability and correct material deficiencies.

ACTIVITY: 4. Spares and Repair Parts

| | (In Thousands of Dollars) |
|------------------|---------------------------|
| FY 1993 Estimate | \$ 98,218 |
| FY 1992 Estimate | 104,279 |
| FY 1991 Estimate | 66,620 |
| FY 1990 Actual | 174,426 |

SECTION 1 - PURPOSE AND SCOPE

This activity provides for procurement of initial spares and repair parts for ballistic missiles, other missiles, and target drones. Included are related provisioning documentation and spares for missile modification programs, peculiar support equipment and training equipment.

SECTION 11 - JUSTIFICATION OF FUNDS REQUESTED

The FY 1992/93 funds are required for spares for weapon systems in production. Initial spares funding requirements are determined by applying standard factors which are based on historical experience. The factors are applied in accordance with type of weapon system, category of support (e.g. air vehicle, support equipment), number of weapon systems in production, production leadtimes, and recurring flyaway costs. Initial spares requirements are validated in the weapon system provisioning process for a specified support period. Replenishment spares include components and repair parts required for the continued support of missiles, drones and related support equipment maintained in the operational inventory. Beginning in FY 1991 the Air Force instituted a new concept of management which transfers funding responsibility for replenishment spares from this central procurement account to the Air Force Stock Fund. Exempt from the Stock Fund are items that are managed by base level classified systems.

TOTAL BUDGET ACTIVITY 4:

SPARES AND REPAIR PARTS

| | (In Thousands of Dollars) | |
|-----------------------------------|---------------------------|----------------|
| | <u>FY 1992</u> | <u>FY 1993</u> |
| <u>INITIAL SPARES</u> | | |
| ACM | 15,907 | 15,366 |
| SRAM II | - | 1,229 |
| AIM-120 Advanced Medium | | |
| Range Air-to-Air Missile (ANRAAM) | 13,987 | 5,977 |
| AGM-88A High Speed | | |
| Anti Radiation Missile (HARM) | 3,435 | 6,270 |
| Target Drones | 503 | 5,380 |
| HAVE NAP | 2,610 | - |
| AGM-130 powered GBU-15 | 1,681 | 1,390 |
| Classified Programs | - | <u>10,279</u> |
| Subtotal | 38,123 | 45,891 |

| | <u>1992</u> | <u>1993</u> |
|------------------------------------|---------------|--------------|
| <u>MODIFICATION INITIAL SPARES</u> | | |
| LGM-30 F/G MINUTEMAN III/III | 10,680 | 6,216 |
| OTHER PROGRAMS | <u>2,433</u> | <u>3,671</u> |
| Subtotal | <u>13,113</u> | <u>9,887</u> |
| TOTAL INITIAL SPARES | 51,236 | 55,778 |
| <u>REPLENISHMENT SPARES</u> | | |
| AIM-7 Sparrow | 6,685 | 10,188 |
| AIM-9 Sidewinder | 7,808 | 4,866 |
| AIM-120 AMRAAM | 11,284 | 8,487 |
| AGM-65A Maverick | 2,765 | 2,393 |
| AGM-69A SRAM | 1,017 | 205 |
| AGM-86 ALOM | 5,372 | 5,374 |
| AGM-88A HARM | 2,917 | 3,064 |
| ACM | 9,445 | 2,853 |
| LGM-30 Minuteman | 339 | 358 |
| LGM-118A Peacekeeper | 159 | 163 |
| HAVE NAP | 1,509 | 1,536 |
| AGM-45 SHRIKE | 2,926 | 2,512 |
| Classified Programs | <u>817</u> | <u>441</u> |
| Total Replenishment Spares | 53,043 | 42,440 |
| TOTAL BUDGET ACTIVITY 4: | | |
| SPARES AND REPAIR PARTS | 104,279 | 98,218 |

ACTIVITY: 5. Other Support

| | (In Thousands of Dollars) |
|------------------|---------------------------|
| FY 1993 Estimate | \$4,256,538 |
| FY 1992 Estimate | 3,705,091 |
| FY 1991 Estimate | 3,843,387 |
| FY 1990 Actual | 3,996,452 |

SECTION I - PURPOSE AND SCOPE

This activity provides for space programs and special programs. Space programs provide launch vehicles, satellites, peculiar ground support equipment, and miscellaneous launch support requirements other than those chargeable to the Operations and Maintenance appropriation. Special programs are of a sensitive nature and require special access.

SECTION 11 - JUSTIFICATION OF FUNDS REQUESTED

The FY 1992 request of \$3,705,091 thousand includes \$1,159,450 for operational space programs and \$2,545,641 thousand for special programs. The FY1993 request of \$4,256,538 thousand includes \$1,470,870 for operational space programs and \$2,785,660 thousand for special programs.

Communications Security (COMSEC)

| (In Thousands of Dollars) | | | |
|---------------------------|--------|---------|--------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| - | 7,873 | - | 8,374 |

This program provides communications security equipment for all critical spaceborne communications systems. Funds requested in this line procure COMSEC products for use in operational space programs. This program is an integral part of the national COMSEC program administered by the National Security Agency. FY 1992 and FY1993 funds provide for the procurement of peculiar anti-jam, data and command authentication encryption/decryption, authentication anti-jam, and weapon system security communication equipment for space and satellite programs.

Navstar Global Positioning System (GPS) (MYP)

| (In Thousands of Dollars) | | | |
|---------------------------|---------|---------|---------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| 4 | 216,086 | 6 | 261,703 |

The operational Navstar GPS system will consist of 21 satellites in six orbital planes and 3 on orbit spare satellites, a ground control station and thousands of user equipment for all services. Users (military aircraft, ships, ground vehicles, and ground personnel) will be able to precisely determine position (to 16 meters spherical probable error accuracy worldwide) and velocity (.1 meters

per second), in three dimensions and unimpaired by weather anywhere in the world. GPS's positional accuracy will significantly improve the effectiveness of reconnaissance, weapons delivery, mine countermeasures and rapid deployment for all services. The FY 1992/1993 funding continues the multiyear procurement of 20 Block IIR replenishment satellites. In addition, the FY 1993 request provides for an annual option for two additional replenishment satellites.

Space Shuttle Operations

| (In Thousands of Dollars) | | | |
|---------------------------|--------|---------|---------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| - | 61,523 | 2 | 130,325 |

The Space Shuttle Operations program provides funds to procure upper stages to support Air Force operational space programs. The FY1992 request provides funds for Inertial Upper Stage (IUS) technical support as well as advance procurement for two IUS vehicles. The FY1993 request procures two IUS vehicles.

Defense Meteorological Satellite Program (DMSP) (MVP)

| (In Thousands of Dollars) | | | |
|---------------------------|---------|---------|--------|
| FY 1992 | | FY 1993 | |
| QTY | AMOUNT | QTY | AMOUNT |
| 2 | 108,052 | - | 7,302 |

DMSP is an advanced weather satellite system that provides timely, worldwide, high quality visible and infrared cloud imagery and other specialized meteorological, oceanographic and solar geophysical data to support DOD strategic missions. Worldwide data are provided to the Air Force Global Weather Central (Offutt AFB, Nebraska) and the Navy's Fleet Numerical Oceanography Center (Monterey, California). Local area cloud imagery data are transmitted for immediate use directly from the satellites to fixed and

mobile Air Force and Navy tactical receiving terminals at key worldwide operating locations and onboard aircraft carriers at sea. The FY 1992 request procures satellites S19-S20 as part of the five spacecraft multiyear initiated in FY 1989. The FY 1993 request provides for general engineering support.

Defense Support Program (DSP) (MYP)

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| - | 192,552 | 1 | 464,076 |

DSP satellites contain sensors which provide near real-time data to the National Command Authority and other designated users. Funds FY 1992 provide for launch support as well as advance procurement for Satellite 23. The FY 1993 request provides full-funding for Satellite 23 as well as advance procurement for Satellite 24.

Defense Satellite Communications System (DSCS) (MYP)

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| - | 55,724 | - | 13,816 |

DSCS provides Super High Frequency (SHF) satellite communications for secure voice and high data rate transmissions. It satisfies unique and vital national security communications requirements for worldwide military command and control, crises management and relay of intelligence, early warning data, treaty monitoring and surveillance information and diplomatic traffic. The DSCS program consists of a space segment, which is an Air Force responsibility, a multi-user terminal segment for ground, airborne, and naval elements, and an operational control segment. The authorized DSCS space segment consists of five operational and two on-orbit spare satellites positioned in geosynchronous orbits to provide global (less

polar) coverage. Existing DSCS II satellites will be replenished with DSCS III satellites. DSCS III provides increased capacity, flexibility, and counter-measure capability. DSCS III satellites will include an Air Force Satellite Communications System single channel transponder for Emergency Action Message dissemination. Funding in FY 1992 procures two Integrated Apogee Boost Subsystem assemblies (IABS) to enable launch of two DSCS III satellites on the Atlas II launch vehicles. FY 1992 also finances general engineering support, satellite storage, and modification to DSCS satellites to allow use of the Atlas II. FY 1993 funding finances satellite storage and general engineering support.

Space Boosters (MYP)

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| - | 295,614 | - | 345,687 |

The Space Boosters program provides access to space for critical DOD payloads. FY 1992 funds avionics ground equipment (AGE) at Cape Canaveral Air Force Station (CCAFS), propellants and launch support services. The FY 1993 request provides funds to continue procurement of AGE for CCAFS, propellants and launch services as well as advance procurement for one TITAN IV launch vehicle in FY 1994.

Medium Launch Vehicle (MLV)

| (In Thousands of Dollars) | | | |
|---------------------------|---------------|----------------|---------------|
| <u>FY 1992</u> | | <u>FY 1993</u> | |
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| 4 | 222,026 | 4 | 239,595 |

This program provides for competitive procurement of medium launch vehicles (MLVs). The Delta II will be used to launch medium weight satellites, such as the NAVSTAR GPS into orbit. The FY 1992 request finances three Delta II launch vehicles to launch NAVSTAR GPS satellites and one Atlas II launch vehicles to launch DSCS satellites. Two Delta IIs and two Atlas IIs are procured in FY 1993.

Nuclear Detonation Detection System (NDS)/(IONDS)

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|--------|---------|--------|
| QTY | AMOUNT | QTY | AMOUNT |
| 4 | 52,640 | 6 | 51,835 |

NDS provides the capability to detect, locate, and report nuclear detonations on a global basis near real-time. NDS sensor packages are employed on NAVSTAR Global Positioning System (GPS) satellites. FY 1992/1993 funding continues the multiyear procurement of NDS sensor suites for the next twenty GPS satellites. In addition, the FY 1993 funding request provides for an annual option for two sensor suites for two GPS satellites.

Forest Green

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|--------|---------|--------|
| QTY | AMOUNT | QTY | AMOUNT |
| - | 582 | - | 270 |

Information concerning this program is included in classified budget documentation material.

Special Programs

(In Thousands of Dollars)

| FY 1992 | | FY 1993 | |
|---------|-----------|---------|-----------|
| QTY | AMOUNT | QTY | AMOUNT |
| - | 2,419,740 | - | 2,527,500 |

Information concerning this program is included in classified budget documentation material.

Special Update Programs

(In Thousands of Dollars)

| <u>FY 1992</u> | | <u>FY 1993</u> | |
|----------------|---------------|----------------|---------------|
| <u>QTY</u> | <u>AMOUNT</u> | <u>QTY</u> | <u>AMOUNT</u> |
| - | 72,679 | - | 206,055 |

Information concerning this program is included in classified budget documentation material.

COMPARISON OF FY 1991 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1991 AMENDED BUDGET WITH FY 1991 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1992 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

| | (In Thousands of Dollars) | | | |
|--|---------------------------|-------------------------|--|------------------------------------|
| | Program Requirements | Program Requirements | | Increase (+) or Decrease (-) |
| | Per 1991 Amended Budget | Per 1992/93 Budget | | |
| <u>BUDGET ACTIVITY</u> | | | | |
| 1. Ballistic Missiles | \$1,885,007 | \$ 546,863 | | \$ 1,338,144 |
| 2. Other Missiles | 2,125,468 | 1,198,892 * | | -926,576 |
| 3. Modification of In-Service Missiles | 111,273 | 109,313 | | -1,960 |
| 4. Spares and Repair Parts | 271,355 | 66,620 | | -204,735 |
| 5. Other Support | 4,612,597 | 3,843,387 | | -769,210 |
| 6. Reimbursable Program | <u>251,800</u> | <u>318,725</u> | | <u>+66,925</u> |
| Total Fiscal Year Program | \$9,257,500 | \$6,083,800 | | \$-3,173,700 |
| * Includes \$33.3M for Maverick | | | | |

EXPLANATION OF CHANGES BY BUDGET ACTIVITY

1. Ballistic Missiles (-\$1,338,144). Congress made the following adjustments (totalling \$-1,216,619 thousand):
 PEACEKEEPER (-\$1,072,119 thousand), PEACEKEEPER Advanced Procurement (-\$133,900 thousand), Missile Replacement
 Equipment-Ballistic (-\$10,600 thousand). Also reflects reduction of \$114,787 thousand for Congressional Inflation
 reduction, (PEACEKEEPER -\$113,762 thousand, Missile Replacement Equipment - Ballistic -\$1,025 thousand).
 Additionally, PEACEKEEPER is reduced \$486 thousand pursuant to Section 8070 of the FY 1991 DOD Appropriation Act, \$800

- thousand pursuant to Section 8050 of the FY 1991 DOD Appropriation Act, and \$24,952 thousand for the Military Personnel Reprogramming. Also reflects an increase of \$19,500 thousand for Treaty Compliance Reprogramming to the PEACEKEEPER program.
2. Other Missiles (-\$926,576). Congress made the following adjustments (totalling -\$890,273 thousand): Advanced Cruise Missile (ACM) Advanced Procurement -\$19,100 thousand), Classified Program (-\$327,538 thousand), Tacit Rainbow (-\$227,441 thousand), SRAM II (-\$4,720 thousand), SRAM II Advanced Procurement (-\$6,390 thousand), Maverick (-\$53,000 thousand), AMRAAM (-\$358,084 thousand). Also reflects reductions of \$16,600 thousand for Congressional inflation reduction (Replacement Equipment - Other \$1,500 thousand, Classified Program \$15,100 thousand); and -\$19,703 thousand for Military Personnel Reprogramming (Maverick -\$19,703 thousand).
3. Modification of In-Service Missiles (-\$1,960). Reflects a reduction of \$2,100 thousand for Congressional Inflation reduction and an increase of \$140 thousand for Treaty Compliance Reprogramming.
4. Spares and Repair Parts (-\$204,735). Congress reduced the FY 1991 Spares and Repair Parts by \$202,222 thousand. Also reflects a reduction of \$2,513 thousand for Congressional Inflation reduction.
5. Other Support (-\$769,210). Congress made the following adjustments (totalling -\$747,054 thousand): Space Shuttle Operations Advance Procurement (+\$8,000 thousand), Space Boosters (-\$1,600 thousand), Special Programs (-\$557,100 thousand), Special Update Programs (-\$196,354 thousand). Also reflects reductions of \$1,078 thousand for Congressional Inflation reduction (Special Update Program -\$1,078 thousand) and \$21,078 thousand for Military Personnel Reprogramming (NAVSTAR GPS -\$21,078 thousand).
6. Reimbursable Program. Increase is due to revised estimates of customer orders.

COMPARISON OF FY 1991 FINANCING AS REFLECTED
IN FY 1991 AMENDED BUDGET WITH FY 1991 FINANCING AS
SHOWN IN FY 1992 BUDGET

| | (In Thousands of Dollars) | | |
|--|---------------------------------|------------------------------------|------------------------------------|
| | Financing Per FY 1991 Budget | Financing Per FY 1992/93 Budget | Increase (+) or Decrease (-) |
| Program Requirements | \$9,257,500 | \$6,083,800 | \$-3,173,700 |
| Program Requirements (Service Account) | (9,005,700) | (5,765,075) | (-3,240,625) |
| Program Requirements (Reimbursable) | (251,800) | (318,725) | (+66,925) |
| Less: | | | |
| Anticipated Reimbursements | 251,800 | 318,725 | 66,925 |
| Transfer from other Accounts | - | 19,640 | -19,640 |
| Add: | | | |
| Reduction due to P.L. 101-511 | - | 2,364 | 2,364 |
| Transfer to Other Accounts | - | 65,733 | 65,733 |
| Appropriation | \$9,005,700 | \$5,813,532 | \$-3,192,168 |

EXPLANATION OF CHANGES IN FINANCING

- The FY 1991 program has decreased \$3,173,700 thousand since submission of the FY 1991 Amended Budget.
- Adjustments by category of financing are explained below:
1. Anticipated Reimbursements. An increase of \$66,925 thousand is due to an increase in anticipated customer orders.
 2. Reduction due to Public Law 101-511. A decrease of \$2,364 thousand for contractor travel/contract assistance service.
 3. Transfer from Other Accounts. Reflects transfer for Treaty Verification.
 4. Transfer to Other Accounts. Reflects transfer for Military Personnel reprogramming.

COMPARISON OF FY 1990 PROGRAM REQUIREMENTS AS REFLECTED
IN FY 1991 AMENDED BUDGET WITH FY 1990 PROGRAM REQUIREMENTS AS
SHOWN IN FY 1992 BUDGET

SUMMARY OF PROGRAM REQUIREMENTS

| | (In Thousands of Dollars) | | |
|--|--|--|------------------------------------|
| | Program Requirements Per 1991 Amended Budget | Program Requirements Per 1992 Budget | Increase (+) or Decrease (-) |
| BUDGET ACTIVITY | | | |
| 1. Ballistic Missiles | \$ 886,359 | \$ 668,076 | \$-218,283 |
| 2. Other Missiles | 1,353,217 | 1,366,876 | +13,659 |
| 3. Modification of In-Service Missiles | 77,057 | 86,428 | +9,371 |
| 4. Spares and Repair Parts | 183,796 | 174,426 | -9,371 |
| 5. Other Support | 4,089,185 | 3,996,452 | -92,733 |
| 6. Reimbursable Program | <u>251,722</u> | <u>225,781</u> | <u>-25,941</u> |
| Total Fiscal Year Program | \$6,841,386 | \$6,518,539 | \$-322,847 |

EXPLANATION BY BUDGET ACTIVITY

1. Ballistic Missiles (-\$218,283). The Peacekeeper program and Peacekeeper, Advance Procurement are reduced a total of \$158,313 thousand pursuant to Section 8102 of the FY991 DOD Appropriation Act. Peacekeeper Advance Procurement is reduced \$53,957 thousand for reprogrammings to Maverick (\$3,500 thousand), Industrial Preparedness (\$450 thousand) and Environmental Restoration (\$32,000 thousand). Missile Replacement Equipment - Ballistic is reduced \$1,800 thousand for a reprogramming to Replacement Equipment - Other.

2. Other Missiles (+\$13,659). The increase of \$13,659 thousand is a net result of reprogrammings for Maverick (+\$9,771 thousand), Industrial Preparedness (+\$450 thousand), Missile Replacement Equipment (+1,800 thousand), and Target Drones (-\$600 thousand).
3. Modification of In-Service Missiles (+\$9,371). The increase of \$9,371 thousand is for a reprogramming to the AOM modification program.
4. Spares and Repair Parts (\$-9,371). Reflects a \$9,371 thousand reduction for a reprogramming to the AOM Modification program.
5. Other Support (-\$92,733). Reflects reprogrammings to Classified Programs, Other Procurement (Special Programs -\$69,000), and AGM-130 (DSP -\$2,000, Shuttle Operations -\$1,700). Also reflects a reduction of 20,033 due to P.L. 101-302.
6. Reimbursable Program (-\$25,941). Decrease is due to revised estimates of customers orders.

COMPARISON OF FY 1990 FINANCING AS REFLECTED
IN FY 1991 AMENDED BUDGET WITH FY 1991 FINANCING AS
SHOWN IN FY 1992 BUDGET

| | (In Thousands of Dollars) | | |
|--|---|---------------------------------|------------------------------------|
| | Financing Per FY 1991 Amended Budget | Financing Per FY 1992 Budget | Increase (+) or Decrease (-) |
| Program Requirements | \$6,841,386 | \$6,518,539 | \$-322,847 |
| Program Requirements (Service Account) | (6,589,614) | (6,292,758) | (-296,856) |
| Program Requirements (Reimbursable) | (251,772) | (225,781) | (-25,971) |
| Less: | | | |
| Anticipated Reimbursements | 251,772 | 225,781 | -25,791 |
| Transfers from Other Accounts | - | 24,200 | 24,200 |
| Add: | | | |
| Transfer to Other Accounts | 174,141 | 262,442 | 88,301 |
| Reduction due to P.L. 101-165 | 153,108 | 153,108 | - |
| Reduction due to P.L. 101-511 | - | 162,613 | 162,613 |
| Reduction due to P.L. 101-302 | - | 70,142 | 70,142 |
| Appropriation | \$6,916,863 | \$6,916,863 | - |